Application Number: 09/452,328 PATENT

Attorney Docket No. 112076-138323

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An automated method for assisting a user of a client system in retrieving and browsing information, the method comprising:

retrieving, by the client system, and displaying on a display of the client system for browsing, a first information page having first contents, responsive to user direction; and

automatically assembling and augmenting, by the client system, the first information page browsed with one or more information source identifiers directly identifying one or more additional information pages with second contents that may be additionally retrieved, the one or more directly identified additional information pages selected based at least in part on second keywords different from but determined to be related to first keywords present in the first information page, the first and second keywords present in a list established prior to the retrieving and displaying of the first information page, the list relating the second keywords to the first keywords and provisioned based on established categories of keywords, and the second contents directly augmenting the first content.

2. (Previously Presented) The method of claim 1, wherein the method further comprises performing on said client system in real time, on retrieval of the first information page, analysis of the first information page to determine presence of said first keywords in the portion of the content of said first information page on which said automatic assembling and augmenting is based.

Application Number: 09/452,328 PATENT

Attorney Docket No. 112076-138323

3. (Previously Presented) The method of claim 2, wherein said analysis comprises performing on said client system in real time, on retrieval of the first information page, scanning of said first information page for unique nouns presence, accessing the keyword list to determine if any of the unique nouns are to be considered as keywords, and outputting those unique nouns that should be so considered as the presence of first keywords.

- 4. (Previously Presented) The method of claim 3, wherein the method further comprises designating to a browser of the client system a first of a plurality of tables of keywords as the keyword list.
- 5. (Original) The method of claim 4, wherein the method further comprises loading/downloading said plurality of tables of keywords onto the client system.
- 6. (Previously Presented) The method of claim 3, wherein said analyzing further comprises performing on said client system in real time, on retrieval of the first information page, retrieval of the second keywords related to the presence of first keywords from one or more tables of related keywords, using said presence of first keywords.
- 7-9. (Cancelled).
- 10. (Currently Amended) The method of claim 43, wherein the information about the first information page is a selected one of (a)
- a locator of the first information page identifying a third party location from where the first information page is being retrieved, (b)
  - a plurality of unique nouns of the first information page, (c)
  - a plurality of first keywords present in the first information page, and (d)
  - a plurality of second keywords related to the first keywords.

Application Number: 09/452,328 PATENT

Attorney Docket No. 112076-138323

11. (Previously Presented) The method of claim 1, wherein said first information page is an information page constituted using a mark-up language.

12. (Currently Amended) The method of claim 1, wherein the method further

comprises displaying on said display a selected one of-

a second information page corresponding to a first of the additional information pages, and

a thumbnail of the second information page).

13. (Currently Amended) The method of claim 12, wherein said displaying of a thumbnail comprises performing on said client system in real time, on retrieval of the first information page, a selected one of

(a) retrieving said thumbnail, and (b)

retrieving said second information page and dithering said retrieved second information page to form said thumbnail.

- 14. (Previously Presented) The method of claim 12, wherein said displaying of a thumbnail is made responsive to proximate placement of a cursor next to a first information source identifier corresponding to said second information page.
- 15. (Currently Amended) An automated method for assisting a user of a client system to retrieve and browse information, the method comprising:

retrieving and displaying on a display of the client system for browsing, a first information page having content, responsive to user direction;

performing on said client system in real time, on retrieval of the first information page, analysis of the first information page to determine presence of first keywords in at least a portion of the content of said first information page, and retrieval of second keywords different from the first keywords and related to the first keywords;

transmitting by the client system over a network connection the second keywords to a server which is not a source server of the first information page;

automatically assembling and augmenting by the client system the first information page browsed with one or more information source identifiers identifying one or more additional information pages that may be additionally retrieved, based at least in part on the automatically determined presence of first keywords in said portion of the content of said first information page, said first and second keywords present in a <u>user-defined</u> list established prior to the retrieving and displaying of the first information page, the list relating the second keywords to the first keywords and provisioned based on established categories of keywords, said one or more information source identifiers received from the server in response to the transmission; and

presenting on the display of the client system, responsive to a user event, a thumbnail of a second information page corresponding to a first of the identified information pages.

16. (Currently Amended) The method of claim 15, wherein said presenting of the thumbnail comprises performing on the client system in real time, a selected one of (a)

retrieving said thumbnail, and (b)

retrieving said second information page, and dithering said retrieved second information page to form said thumbnail.

- 17. (Previously Presented) The method of claim 15, wherein said presenting of the thumbnail is made responsive to proximate placement of a cursor next to a first information source identifier corresponding to the second information page.
- 18. (Previously Presented) In a server system, an automated method for facilitating provision of assistance to a user of a networked client system to retrieve and browse information, the method comprising:

receiving from said client system in real time via a computer networking connection, on retrieval from a third party location by the client system a first information page to be browsed on the client system, first keywords different from but related to presence of second keywords in the first information page and present in a list established prior to retrieval of the first information page, the list relating the second keywords to the first keywords and provisioned based on established categories of keywords, where at least the second keywords present in the first information page are dynamically determined by the client system in real time on retrieval of the first information page; and

in response, providing to said client system a plurality of information source identifiers identifying a plurality of additional information pages that may be additionally retrieved, based at least in part on said received related first keywords to enable the first information page to be automatically augmented on the client system with information source identifiers identifying information pages based on the related first keywords.

- 19. (Original) The method of claim 18, wherein the method further comprises providing to said client system a thumbnail of a second information page corresponding to a first of said information source identifiers.
- 20. (Original) The method of claim 19, wherein the method further comprises retrieving said second information page and dithering said second information page to form said thumbnail.
- 21. (Currently Amended) In a server system, an automated method for facilitating provision of assistance to a user of a networked client system to retrieve and browse information, the method comprising:

receiving from said client system in real time, wherein the client system is stored as a module on a computer system separate from a computer system on which the server system is stored, on retrieval from a third party location by the client

system a first information page having first content to be browsed on the client system, presence of first keywords in the first information page, the first keywords also present in a <u>user-defined</u> list of keywords established prior to retrieval of the first information page, the <u>user-defined</u> list provisioned based on established categories of keywords, and where presence of the first keywords of the first information page is dynamically determined in real time by the client system on retrieval of the first information page; and

in response, providing to said client system a plurality of information source identifiers directly identifying a plurality of additional information pages with second contents that may be additionally retrieved, based at least in part on second keywords different from but related to the first keywords, the <u>user-defined</u> list of keywords relating the first keywords to the second keywords, the second contents directly augmenting the first contents.

- 22. (Previously Presented) The method of claim 21, wherein the method further comprises dynamically determining second keywords related to said first keywords; and said providing of information source identifiers to said client system is made based at least in part on said dynamically determined related second keywords.
- 23. (Original) The method of claim 21, wherein the method further comprises providing to said client system a thumbnail of a second information page corresponding to a first of said information source identifiers.
- 24. (Original) The method of claim 23, wherein the method further comprises retrieving said second information page and dithering said second information page to form said thumbnail.
- 25. (Previously Presented) In a server system, an automated method for facilitating provision of assistance to a user of a networked client system to retrieve and browse information, the method comprising:

receiving via a network connection from said client system in real time, on retrieval from a third party location by a client system a first information page with first contents to be browsed on the client system, unique nouns of the first information page, where the unique nouns are dynamically determined in real time by the client system on retrieval of the first information page; and

in response, providing to said client system a plurality of information source identifiers directly identifying a plurality of additional information pages with second contents that may be additionally retrieved, based at least in part on second keywords different from but related to first keywords present in the first information page and present in a list of keywords established prior to retrieval of the first information page, the list relating the second keywords to the first keywords and provisioned based on established categories of keywords, the second contents directly augmenting the first contents.

- 26. (Previously Presented) The method of claim 25, wherein the method further comprises dynamically determining the first keywords present in said first information page using said received unique nouns.
- 27. (Previously Presented) The method of claim 26, wherein the method further comprises dynamically determining the related second keywords of said presence of first keywords.
- 28. (Original) The method of claim 25, wherein the method further comprises providing to said client system a thumbnail of a second information page corresponding to a first of said information source identifiers.
- 29. (Original) The method of claim 28, wherein the method further comprises retrieving said second information page and dithering said second information page to form said thumbnail.

Attorney Docket No. 112076-138323

30. (Previously Presented) In a server system, an automated method for facilitating provision of assistance to a user of a networked client system to retrieve and browse information, the method comprising:

receiving via a network connection in real time from said client system, on retrieval from a third party location by the client system a first information page to be browsed on the client system, a locator of the first information page identifying the third party location; and

providing to said client system a plurality of information source identifiers identifying a plurality of additional information pages that may be additionally retrieved, based at least in part on second keywords different from but related to first keywords present in the first information page and present in a list of keywords established prior to retrieval of the first information page, the list relating the second keywords to the first keywords and provisioned based on established categories of keywords.

- 31. (Previously Presented) The method of claim 30, wherein the method further comprises retrieving said first information page and dynamically analyzing the retrieved first information page in real time to determine presence of first keywords in said information page.
- 32. (Previously Presented) The method of claim 31, wherein the method further comprises dynamically determining the related second keywords of said presence of first keywords.
- 33. (Original) The method of claim 30, wherein the method further comprises providing to said client system a thumbnail of a second information page corresponding to a first of said information source identifiers.

Application Number: 09/452,328 **PATENT** 

Attorney Docket No. 112076-138323

34. (Original) The method of claim 33, wherein the method further comprises

retrieving said second information page and dithering said second information page

to form said thumbnail.

35. (Currently Amended) A client system comprising:

a display;

a networking device;

a program processor configured to facilitate augmented viewing of a first

retrieved information page having first contents, including an analyzer configured to

analyze the first contents to determine a plurality of unique nouns present, determine

which of the plurality of unique nouns are first keywords present in a static user-

defined list of keywords established prior to retrieval of the first information page, the

user-defined list provisioned based on established categories of keywords, transmit

second keywords different from but related to the first keywords to a server via the

networking device, receive a plurality of information source identifiers directly

identifying a plurality of additional information pages with second contents that may

be additionally retrieved, the second contents directly augmenting said first contents,

and to dynamically and automatically assemble the plurality of information source

identifiers into the first information page; and

an information source database having a user-defined plurality of first

keywords and a user-defined plurality of second keywords related to the plurality of

first keywords.

36. (Previously Presented) The client system of claim 35, wherein the analyzer

further comprises a lexical analyzer to facilitate determination in real time the unique

nouns.

37. (Cancelled).

10

Application Number: 09/452,328 **PATENT** 

Attorney Docket No. 112076-138323

38. (Previously Presented) The client system of claim 35, wherein the client system further comprises a dithering module to dither a second information page retrieved to augment the first retrieved information page, to generate a thumbnail of the second retrieved information page.

39. (Currently Amended) A server system comprising:

a network interface configured to couple the server system to a network; an information source database configured to store a first plurality of keywords, a second plurality of keywords different from but related to the first plurality of keywords, and a plurality of associated information source identifiers of the first keywords, directly identifying a plurality of information pages with first contents that may be retrieved; and

a plurality of programming instructions processor coupled to the network interface and the information source database, and configured to facilitate automatic augmented provision of dynamically assembled additional information source identifiers by a browser of a client system communicatively coupled via the network, the client system provisioning a list of keywords established prior to retrieval of the first contents, the list relating the first plurality of keywords to the second plurality of keywords and provisioned based on established categories of keywords, the keywords of the keyword list comprising at least some of the first plurality of keywords, the dynamically assembled information source identifiers comprising a subset of the plurality of associated information source identifiers and dynamically assembled by the <del>programming instructionsprocessor</del> accessing the information source database based at least in part on a portion of a first information page with second content retrieved from a third party location for browsing on said client system, the first contents directly augmenting the second contents,.

(Previously Presented) The server system of claim 39, wherein the server 40. system further comprises

PATENT

Application Number: 09/452,328 Attorney Docket No. 112076-138323

a keyword database, having said second plurality of keywords and said first plurality of keywords, the first and second keywords being related, configured to facilitate determination of related second keywords of presence of first keywords in the first retrieved information page.

- 41. (Currently Amended) The server system of claim 39, wherein the <del>plurality of programming instructions are processor is</del> further configured to implement a lexical analyzer configured to facilitate determination of unique nouns in said first retrieved information page being browsed, for use in determining presence of said first keywords in said first retrieved information page being browsed.
- 42. (Currently Amended) The server system of claim 39, wherein the <del>plurality of programming instructions are processor is further configured to implement a dithering module configured to dither a second retrieved information page retrieved to augment the first retrieved information page to generate a thumbnail of the second retrieved information page.</del>
- 43. (Previously Presented) The method of claim 1 comprising transmitting to a server, by the client system over a network connection, information about the first information page, wherein the server is not a source server of the first information page and receiving said one or more information source identifiers from the server in response to the transmission.
- 44. (Currently Amended) An automated method for assisting a user of a client system in retrieving and browsing information, the method comprising:

retrieving, by the client system, and displaying on a display of the client system for browsing, a first information page having first contents responsive to user direction; and

automatically assembling and augmenting, by the client system, the first information page browsed with one or more information source identifiers directly

PATENT

Application Number: 09/452,328 Attorney Docket No. 112076-138323

identifying one or more additional information pages with second contents that may be additionally retrieved, the one or more directly identified additional information pages selected based at least in part on second keywords different from but determined to be related based on a user-defined relationship to first keywords present in the first information page, the first and second keywords present in a user-defined list established prior to the retrieving and displaying of the first information page, the user-defined list comprising keywords relating the second keywords to the first keywords, and the second contents directly augmenting the first content.

- 45. (Previously Presented) The method of claim 44, wherein the method further comprises performing on said client system in real time, on retrieval of the first information page, analysis of the first information page to determine presence of said first keywords in the portion of the content of said first information page on which said automatic assembling and augmenting is based.
- 46. (Currently Amended) The method of claim 45, wherein said analysis comprises performing on said client system in real time, on retrieval of the first information page, scanning of said first information page for presence of unique nouns, accessing the <u>user-defined</u> keyword list to determine if any of the unique nouns are first keywords, and outputting those unique nouns that should be so considered as the presence of first keywords.
- 47. (Previously Presented) An apparatus comprising:

means for retrieving and displaying on a display for browsing, a first information page having first contents responsive to user direction; and

means for automatically assembling and augmenting the first information page browsed with one or more information source identifiers directly identifying one or more additional information pages with second contents that may be additionally retrieved, the one or more directly identified additional information pages selected

PATENT

Application Number: 09/452,328 Attorney Docket No. 112076-138323

based at least in part on second keywords different from but determined to be related to first keywords present in the first information page, the first and second keywords present in a list established prior to the retrieving and displaying of the first information page, the list comprising keywords relating the second keywords to the first keywords and provisioned based on established categories of keywords, and the second contents directly augmenting the first content.

- 48. (Previously Presented) The apparatus of claim 47, further comprising means for analysis of the first information page to determine presence of said first keywords in the portion of the content of said first information page on which said automatic assembling and augmenting is based.
- 49. (Currently Amended) An article of manufacture computer readable medium comprising:
  - a computer readable storage mediumdevice; and

a plurality of programming instructions stored in the <u>computer readable</u> storage <u>devicemedium</u>, the programming instructions, <u>designed to program a</u> system, to enable the system, when the programming instructions are if executed <u>by a computing device</u>, <u>cause the computing device</u> to retrieve and display on a display for browsing, a first information page having first contents responsive to user direction, and to automatically assemble and augment the first information page browsed with one or more information source identifiers directly identifying one or more additional information pages with second contents that may be additionally retrieved, the one or more directly identified additional information pages selected based at least in part on second keywords different from but determined to be related to first keywords present in the first information page, the first and second keywords present in a list established prior to the retrieving and displaying of the first information page, the list comprising keywords relating the second keywords to the first keywords and provisioned based on established categories of keywords, and the second contents directly augmenting the first content.

50. (Currently Amended) The computer readable mediumarticle of manufacture of claim 49, wherein the plurality of programming instructions, if executed by the computing device, are further designed to program the system, to enable the system cause the computing device to analyze the first information page to determine presence of said first keywords in the portion of the content of said first information page on which said automatic assembling and augmenting is based.

51. (New) A method to assist a user of a client system to retrieve and browse information, the method comprising:

retrieving, by the client system, and displaying on a display of the client system for browsing, a first information page having first contents;

identifying, by the client system, one or more unique nouns present in the first information page;

determining, by the client system, whether the one or more identified unique nouns match one or more keywords in a user-defined keyword list, the keyword list including one or more keywords and, for each keyword, one or more user-defined related keywords;

for each of the one or more matching keywords, identifying the one or more user-defined related keywords; and

automatically assembling and augmenting, by the client system, the first information page browsed with one or more information source identifiers directly identifying one or more additional information pages with second contents that may be additionally retrieved, the one or more directly identified additional information pages selected based at least in part on the related keywords, and the second contents directly augmenting the first contents.

52. (New) A server system comprising:means for coupling the server system to a network;

means for storing a first plurality of keywords, a second plurality of keywords different from but related to the first plurality of keywords, and a plurality of associated information source identifiers of the first keywords, directly identifying a plurality of information pages with first contents that may be retrieved; and

means for facilitating automatic augmented provision of dynamically assembled additional information source identifiers by a browser of a client system communicatively coupled via the network, the client system provisioning a list of keywords established prior to retrieval of the first contents, the list relating the first plurality of keywords to the second plurality of keywords and provisioned based on established categories of keywords, the keywords of the keyword list comprising at least some of the first plurality of keywords, the dynamically assembled information source identifiers comprising a subset of the plurality of associated information source identifiers and dynamically assembled by the facilitating means accessing an information source database based at least in part on a portion of a first information page with second content retrieved from a third party location for browsing on said client system, the first contents directly augmenting the second contents,.